PART 1 - GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 648 (1997) Critical Radiant Flux of Floor-Covering Systems

Using a Radiant Heat Energy Source

ASTM F 1344 (1993) Rubber Floor Tile

1.2 SUBMITTALS

Submit the following in accordance with Section 01330, "Submittal Procedures."

1.2.1 SD-03, Product Data

- a. Rubber tile
- b. Wall base
- c. Stair treads
- d. Adhesives

1.2.2 SD-04, Samples

- a. Floor materials
- b. Wall base
- c. Stair treads

Where colors and patterns are not indicated, submit 2 sets of manufacturer's standard colors and patterns for selection.

1.2.3 SD-10, Operation and Maintenance Data

a. Floor materials, Data Package 1

Submit data package in accordance with Section 01781, "Operation and Maintenance Data."

1.3 DELIVERY AND STORAGE

Deliver materials to job in manufacturer's original, unopened containers with brands, names, and production runs clearly marked thereon. Handle carefully and store in original containers at no less than 65 degrees F for at least 48 hours prior to starting work. Do not open containers until they are inspected and accepted by Contracting Officer.

1.4 ENVIRONMENTAL CONDITIONS

Maintain temperature of spaces in which flooring work is to be performed at no less than 65 degrees F at floor level for 48 hours prior to starting work, during time work is performed, and for 48 hours after work is complete. Maintain minimum temperature of 55 degrees F, thereafter. Provide adequate ventilation to remove moisture and fumes from area.

1.5 EXTRA STOCK

After completion of work, deliver additional materials to Government for use in repairs and maintenance. Additional materials of each color shall be from same production run as installed materials. Furnish tile and base in original boxes, properly marked, in the following quantities and with colors in same proportions as installed materials:

- a. Rubber tile 12 pieces each type
- b. Wall base 10 lineal feet

PART 2 - PRODUCTS

2.1 FLOOR MATERIALS

2.1.1 Color and Pattern

Color and distinct pattern shall be uniformly distributed throughout thickness of tile. Materials of same type, pattern, and color shall be of same production run and so marked. Variations in shades and off-pattern matches between containers not acceptable. Flooring in continuous area or replacement of damaged flooring in continuous area shall be from same production run with same shade and pattern.

2.1.2 Flammability

Critical radiant flux of 0.22 or greater when tested in accordance with ASTM E 648.

2.1.3 Rubber Tile

Smooth surface rubber floor tile, homogeneous solid color 24" x 24", .115" thick.

2.1.4 Rubber Landing Tile

ASTM F 1344, homogeneous solid color 24" x 24" Square Disk Pattern tiles, .155" thick, compatible with rubber treads.

2.1.5 Wall Base

Rubber cover, adjacent to resilient flooring. Base shall be 4 inches high, 0.125 inch thick, color to be selected from samples. Use flexible base to conform to irregularities in walls, partitions, and floors. Provide 0.125 inch thick premolded corners in matching size, shape, and color for all right angle inside and outside corners with a 0.125 inch thick base.

2.1.6 Stair Treads

Rubber, square nose profile, disc surface 1/4 inch nominal thickness in front 4 inches of wear area; balance to be 1/8 inch nominal thickness; nose 3/16 inch nominal thickness. Provide 1/8 inch thick skirting and 6 inch cove base for risers. Treads to have 80 percent of back and nose sanded by manufacturer to assure good adhesion. Provide manufacturer's epoxy nose filler to completely fill gap between stair and tread nose for all treads.

2.1.7 Underlayment

Latex type, as recommended by flooring manufacturer.

2.1.8 Adhesives

2.1.8.1 Adhesive for Wall Base

Emulsified acrylic latex; non-flammable.

2.1.8.2 Other Adhesives

As recommended by floor material manufacturer.

2.1.9 Finish

Flooring manufacturer's standard high-solids finish for shine without buffing; non-flammable; compatible with factory-applied finish. May be buffed or burnished for maximum gloss.

2.1.10 Edging Strips

Beveled rubber.

PART 3 - EXECUTION

3.1 CONDITION OF SURFACES

Surfaces that are to receive flooring shall be clean, dry, smooth, firm, sound and free of oil, paint, wax, dirt, or other damaging materials.

3.1.1 Preparation of Surfaces

3.1.1.1 Concrete Floor Surfaces

Grind ridges and other uneven surfaces smooth. Remove concrete curing compounds, other than types that do not adversely affect adhesive. Cut out and fill all cracks 1/16 inch wide and wider with crack filler. Provide latex underlayment to fill remaining holes, cracks, and depressions and for smoothing, leveling, and feather-edging concrete. Remove loose particles; vacuum chalky, dusty surfaces; prime cleaned surfaces, if recommended by flooring manufacturer.

3.1.2 Moisture Test for Concrete Floors

As recommended by floor covering manufacturer.

3.2 APPLICATION

To avoid damage, install flooring after other tradesmen in same area have completed their work. Apply flooring and accessories in accordance with manufacturer's directions, using workmen experienced in application of such flooring. Detailed requirements:

- a. Adhesives: Apply in accordance with adhesive manufacturer's printed directions. Do not allow smoking, open flames or other sources of ignition in area where solvent-containing adhesives are being used or spread. Post conspicuous signs reading "NO SMOKING OR OPEN FLAME" in area of the spread adhesive.
- b. Flooring: Apply in patterns indicated. Start in center of room or area, and work toward edges. Keep tile lines and joints square, symmetrical, tight, and even. Keep each floor in true, level plane, except where slope is indicated. Vary width of edge tiles as necessary to maintain full-size tiles in field, but no edge tile shall be less than one-half full size, except where irregular-shape makes it impossible.
- c. Cutting: Cut to fit around permanent fixtures, built-in furniture, pipes, and outlets. Cut flooring edges and scribe to walls and partitions after field flooring has been applied.
- d. Edge Strips: Provide edging strips where flooring terminates at points higher than contiguous finished flooring, except where thresholds are provided. Secure plastic strips with adhesive.

3.2.1 Application of Rubber Tile

Lay tile in the adhesive in indicated pattern. Immediately after installation, roll floors with three-section roller weighing not less than 100 pounds; then sandbag high points and raised edges until danger of loosening has passed.

3.2.2 Application of Wall Base

Apply wall base after flooring is complete and wall surface is dry. Form inside and outside corners with base materials, as specified herein.

3.2.2.1 Surface Preparation

Fill cracks and voids in wall with crack filler. Bring irregular surfaces to smooth finish with smoothing compound.

3.2.2.2 Wall Base

Apply adhesive to back of base with notched trowel, leaving approximately 1/4 inch bare space along top edge of base. Immediately press base firmly against wall, and move into place, making sure that toe is in contact with floor surface and wall. Roll entire vertical surface of base with hand roller, and press toe of base with a straight piece of wood to ensure proper alignment.

3.2.3 Application of Stair Treads

Fit treads carefully, and securely bond with adhesive, in accordance with manufacturer's directions. Nose of rubber treads to fit tightly against face of stair riser or nosing with open spaces between stair and rubber tread completely filled with epoxy. Roll all treads and risers until firm bond has been established.

3.3 CLEANING AND FINISHING

3.3.1 Cleaning

Follow flooring manufacturer's recommendations to remove surplus adhesive, and clean flooring and adjacent surfaces. Ten days after installing, wash flooring with flooring manufacturer's recommended cleaning solution; rinse thoroughly with cool, clean water. Avoid flooding of floor.

3.3.2 Finishing

- a. Clean bases and stair treads, but do not polish them.
- b. Clean floor by damp mopping. Do not buff.

3.4 PROTECTION

Protect flooring and stair treads from traffic for 48 hours after installation to allow set of adhesive. From time of laying until acceptance, protect floor and stair treads from damage. Remove and replace defects which develop, such as damaged, loose, broken, or curled tiles prior to final inspection.

END OF SECTION